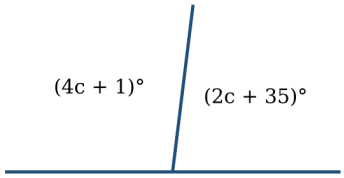
Day 227	B Tier 10-a-day

1 The diagram shows 2 angles on a straight line.
Work out the value of c.
The diagram is not drawn accurately.

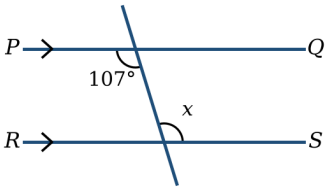


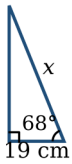
2 Here are four digit cards.
8 6 5 2
Use all four cards to make the largest possible even number.

3 Here is a formula.
v = u + at
Work out the value of v when u = 4, a = 5 and t = 4

4 Electricity costs 20p per unit.
There is also a standing charge of £12.
Work out the total bill for 200 units.

5 In the diagram, PQ is parallel to RS.
(a) Work out the size of angle x.
(b) Give a reason for your answer.
The diagram is not drawn accurately.



Day 227	B Tier 10-a-day
6 $A = 2 \times 3^3 \times 5$ $B = 2 \times 3^2 \times 7^2$ Write down, as a product of prime factors, (a) the HCF of A and B (b) the LCM of A and B	
7 Find the length of x. (Calculator) Give your answer correct to 1 decimal place. The diagram is not drawn accurately. 	
8 100 deer in a lake are caught, tagged and returned to the lake. Later, a sample of 30 deer is caught and 3 of them are tagged. Estimate the total number of deer in the lake.	
9 Line L has equation $y = 4x + 1$ Line M is parallel to line L and passes through the point $(4, -5)$. Find the equation of line M.	
10 Two lights flash at 09:00. One light flashes every 15 minutes. The other light flashes every 18 minutes. At what time do both lights next flash together?	